Bruhat Bangalore Mahanagara Palike
Executive Engineer Yelahanka Division

Name of Work-"Construction of Concrete Roads And Drains in Allansandra Colony"

					Estimate Cost			100.00 Lakhs	
Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
1	Removing And Resetting Of Footpath Slab [Approved Rate]								
	(Yelahanka zone) Appproved Rate	**235.00**							
		Sqm							
	Allansandra Colony								
	Backup Anjenaya Temple Rd		1	75.00	0.60		45.00		
	Rammanna House Rd		1	70.00	0.60		42.00		
	Connecting Roads								
			2	65.00	0.75		97.50		
			1	60.00	0.75		45.00		
							229.50		
	Deduct 20% Missing/ Damaged Slab						45.90		
							183.60	**235.00**	**43,146.00**
2	**Earth work excavation by manual means** for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work . (V-I.No 1.4,Page No-5 CSR 2023-24) & (V-III Page No.5, Item No.1.1C of CSR 2023-24)								
	Basic rate	**242.00**							
	loading And Unloading	**86.00**							
	Sub Total	**328.00**							
	Area Weightage 10%	**32.80**							
	Total	**360.80**							
		Cum							
	Drain Desilt								
	Allansandra Colony								
	Backup Anjenaya Temple Rd		1	75.00	0.30	0.50	11.25		
	Rammanna House Rd		1	70.00	0.30	0.50	10.50		
	Connecting Roads								
			2	65.00	0.45	0.45	26.33		
			1	60.00	0.45	0.40	10.80		
	RCC Drain								
	Kanakanagara								
	5th Cross Rd/2		2	50.00	1.10	0.95	104.50		
	Connecting Drain		1	53.00	1.10	0.95	55.39		
	5th Cross Rd		1	20.00	1.10	0.95	20.90		
	4th Cross Rd		1	85.00	1.40	0.95	113.05		
	29th Cross Rd LHS		1	115.00	1.40	1.10	177.10		
	29th Cross Rd RHS		1	50.00	1.40	1.10	77.00		
	RCC Culvert		6	6.00	1.50	0.90	48.60		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
							655.41		
	Deduct 10% Voids						65.54		
							589.87	**360.80**	**212824.74**
3	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately) **Mix 1:3:6 (M10) Using 40 mm nominal size graded crushed coarse aggregates** (V-1, P.No-15, I No-2.1.3 of CSR 2023-24)								
	Basic rate	**5989.00**							
	Area Weightage 10%	**598.90**							
	Total	**6587.90**							
		Cum							
	Kanakanagara								
	5th Cross Rd/2		2	50.00	1.10	0.15	16.50		
	Connecting Drain		1	53.00	1.10	0.15	8.75		
	5th Cross Rd		1	20.00	1.10	0.15	3.30		
	4th Cross Rd		1	85.00	1.40	0.15	17.85		
	29th Cross Rd LHS		1	115.00	1.40	0.15	24.15		
	29th Cross Rd RHS		1	50.00	1.40	0.15	10.50		
	RCC Culvert		6	6.00	1.50	0.15	8.10		
							89.15	**6587.90**	**587278.35**
4	Supplying, fitting and placing **TMT FE 550 / 550D Steel Reinforcement** including cost of all materials, machinery, labour, cleaning, straightening, cutting, bending, hooking, laping/welding joints, tying with binding wire / soft annealed steel wire and other ancilary operations complete as per drawing and technical specification.All other type of structures .(V-I, I.No 2.11 h Page No 18,CSR 2023-24)								
	Basic rate	**79011.00**							
	Area Weightage 10%	**7901.10**							
	Total	**86912.10**							
		Ton							
	Consider 60kg/Cum For Drain		1	166.76	60.00		10005.30		
	Consider 90kg/Cum For Culvert		1	18.58	90.00		1671.84		
							11677.14		
							11.68	**86912.10**	**1014384.76**
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork to be paid separately) **M20 Design Mix Using 20 mm nominal size graded crushed coarse aggregates** (V-1,P.No.16, I.No.2.4.2 of CSR 2023-24)& (Addendum I , V-1, P.No.111 of CSR 2023-24)								
	Basic rate	**6323.00**							
	Formwork 5%	**316.15**							
	Sub Total 1	**6639.15**							

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Area Weightage 10%	**663.92**							
	Total	**7303.07**							
		Cum							
	RCC Drain Raft								
	Kanakanagara								
	5th Cross Rd/2		2	50.00	0.90	0.15	13.50		
	Connecting Drain		1	53.00	0.90	0.15	7.16		
	5th Cross Rd		1	20.00	0.90	0.15	2.70		
	4th Cross Rd		1	85.00	1.20	0.15	15.30		
	29th Cross Rd LHS		1	115.00	1.20	0.15	20.70		
	29th Cross Rd RHS		1	50.00	1.20	0.15	9.00		
	RCC Drain Wall								
	Kanakanagara								
	5th Cross Rd/2		4	50.00	0.15	0.75	22.50		
	Connecting Drain		2	53.00	0.15	0.75	11.93		
	5th Cross Rd		2	20.00	0.15	0.60	3.60		
	4th Cross Rd		2	85.00	0.15	0.65	16.58		
	29th Cross Rd LHS		2	115.00	0.15	0.90	31.05		
	29th Cross Rd RHS		2	50.00	0.15	0.85	12.75		
							166.76		
	Drain Coping								
	Allansandra Colony								
	Backup Anjenaya Temple Rd		2	75.00	0.15	0.15	3.38		
	Rammanna House Rd		2	70.00	0.15	0.15	3.15		
	Connecting Roads								
			4	65.00	0.15	0.15	5.85		
			2	60.00	0.15	0.15	2.70		
							15.08		
	RCC Culvert Raft		6	6.00	1.20	0.20	8.64		
	RCC Culvert Wall		12	6.00	0.23	0.60	9.94		
							18.58		
							200.41	**7303.07**	**1463578.04**
6	Providing and fixing precast reinforced cement concrete **covering slabs of 10Cm thick** made of M20 with OPC cement, with 20mm and down size graded granite metal coarse aggregate @0.70cum and fine aggregate & 0.74 cum with superplasticizer machine,mixed, Inculding providing and removing centering, shuttering, strutting propping etc., for edges of slabs with TMT steel (Fe500) cost of all materials, labour, all lead and lift, HOM of machinery, curing, including cost of reinforcement etc., complete as directed by the Engineer in charge of the work.(Exclusive of GST) Approved Rate								
	(Yelahanka zone) Data Rate	**2072.00**							
		Sqm							
	Kanakanagara								
	5th Cross Rd/2		2	50.00	0.90		90.00		
	Connecting Drain		1	53.00	0.90		47.70		
	5th Cross Rd		1	20.00	0.90		18.00		
	4th Cross Rd		1	85.00	1.20		102.00		
	29th Cross Rd LHS		1	115.00	1.20		138.00		
	29th Cross Rd RHS		1	50.00	1.20		60.00		
	Damaged/ Missing Slab From Item No-01						**45.90**		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
							501.60	**2072.00**	**1039315.20**
7	Providing and fixing precast reinforced cement concrete **covering slabs of 23Cm thick** made of M25 with OPC cement,@340kgs/cum with 20mm and down size graded granite metal coarse aggregate @0.70cum and fine aggregate & 0.74 cum with superplasticizer machine,mixed, Inculding providing and removing centering, shuttering, strutting propping etc., for edges of slabs with TMT steel (Fe500) cost of all materials, labour, all lead and lift, HOM of machinery, curing, including cost of reinforcement etc., complete as directed by the Engineer in charge of the work.(Exclusive of GST) Approved Rate								
	(Yelahanka zone) Data Rate	**5037.00**							
		Sqm							
	For RCC Culvert		6	6.00	1.20		43.20		
							43.20	**5037.00**	**217598.40**
8	**Dismantling of cement** concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 m3 in volume and stock piling at designated locations and disposal of dismantled materials and stacking serviceable and unserviceable materials separatel (V-III Page No.12, Item No.2.19 of CSR 2023-24)								
	Basic rate	**563.00**							
	Area Weightage 10%	**56.30**							
	Total	**619.30**							
		Cum							
	For CC Road								
	Kanakanagara								
	5th Cross Rd/2		1	20.00	4.50	0.25	22.50		
							22.50		
	Deduct 25% Voids						**5.63**		
							16.88	**619.30**	**10,450.69**
9	**Earth work in surface excavation by mechanical means** for lowering & leveling the ground for all works other than foundation in all kinds of soils & upto depth not exceeding 300mm as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter including dressing of excavated surfaces, disposing off or levelling the excavated earth or sorting & stacking the selected earth for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools, usage of machinery & other appurtenances required to complete the work In all kinds of soils upto 300 mm depth ((V-I, P.No-8, I No-1.12 of CSR 2023-24)								
	Basic rate	**95.00**							
	Area Weightage 10%	**9.50**							
	Total	**104.50**							
		Cum							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Allansandra Colony								
	1st Main Rd								
	Allansandra Burial Ground to R.O Plant Through Shaneshwara Temple		2	636.00	0.60	0.25	190.80		
	From Library To Appana Rd		2	130.00	0.60	0.25	39.00		
							229.80	**104.50**	**24,014.10**

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
10	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver/grader in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density (V-III, P.No-26,I No-4.17)of CSR 2023-24).								
	Basic rate	**2559.00**							
	Area Weightage 10%	**255.90**							
	Total	**2814.90**							
		Cum							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Allansandra Colony								
	1st Main Rd								
	Allansandra Burial Ground to R.O Plant Through Shaneshwara Temple		2	636.00	0.60	0.225	171.72		
	From Library To Appana Rd		2	130.00	0.60	0.225	35.10		
							206.82	**2814.90**	**582177.62**
11	Providing and applying **primer coat** with SS1 grade Bitumen Emulsion on prepared surface of granular base including cleaning of road surface and spraying primer at the rate of 0.90 kg per m2 using mechanical means. (V-III, P.No-31,I No-5.1(i) of CSR 2023-24).								
	Basic rate	**41.00**							
	Area Weightage 10%	**4.10**							
	Total	**45.10**							
		Sqm							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Allansandra Colony								
	1st Main Rd								
	Allansandra Burial Ground to R.O Plant Through Shaneshwara Temple		2	636.00	0.60		763.20		
	From Library To Appana Rd		2	130.00	0.60		156.00		
							919.20	**45.10**	**41,455.92**
12	Providing and applying **tack coat** with VG-10 Bitumen using pressure distributor at the rate of 0.20 kg/m2on the prepared bituminous surface cleaned with mechanical broom.(V-III, P.No-43,I No-5.32 of CSR 2023-24).								
	Basic rate	**12.00**							
	Area Weightage 10%	**1.20**							
	Total	**13.20**							
		Sqm							
	For BC								
	Allansandra Colony								
	1st Main Rd								

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	Allansandra Burial Ground to R.O Plant Through Shaneshwara Temple		1	636.00	6.60		4197.60		
	From Library To Appana Rd		1	130.00	5.00		650.00		
							4847.60	**13.20**	**63,988.32**
13	Providing and laying Dense **Graded Bituminous Macadam** with 40/60 TPH capacity HMP using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 4.5 per cent by weight of total mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRTH specification clause No. 505 complete in all respects. (V-III, P.No-35,I No-5.12C of CSR 2023-24).								
	Basic rate	**9449.00**							
	Area Weightage 10%	**944.90**							
	Total	**10393.90**							
		Cum							
	For Asphalt Edge Correction & Damaged Portion / Pipeline cut portion								
	Allansandra Colony								
	1st Main Rd								
	Allansandra Burial Ground to R.O Plant Through Shaneshwara Temple		2	636.00	0.60	0.05	38.16		
	From Library To Appana Rd		2	130.00	0.60	0.05	7.80		
							45.96	**10393.90**	**477703.64**
14	Providing and laying **Bituminous Concrete** with 40/60 TPH capacity hot mix plant using crushed aggregates of specified grading, premixed with bituminous binder VG-30, @ 5.4 per cent of mix and filler, transporting the hot mix to work site, laying with mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 507 complete in all respects (V-III, P.No.38, I.No.5.16C of CSR 2023-24).								
	Basic rate	**10954.00**							
	Area Weightage 10%	**1095.40**							
	Total	**12049.40**							
		Cum							
	For BC								
	Allansandra Colony								
	1st Main Rd								
	Allansandra Burial Ground to R.O Plant Through Shaneshwara Temple		1	636.00	6.60	0.04	167.90		
	From Library To Appana Rd		1	130.00	5.00	0.04	26.00		
							193.90	**12049.40**	**2336426.86**

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
15	Construction of **dry lean cement concrete** Sub- base over a prepared sub-grade with coarse and fine aggregate conforming to IS: 383, the size of coarse aggregate not exceeding 25 mm, aggregate cement ratio not to exceed 15:1, aggregate gradation after blending to be as per table 600-1, cement content not to be less than 150 kg/ m3, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 t vibratory roller, finishing and curing. (V-III Page No.49, Item No.6.1 of CSR 2023-24)								
	Basic rate	**4920.00**							
	Area Weightage 10%	**492.00**							
	Total	**5412.00**							
		Cum							
	For CC Road								
	Kanakanagara								
	5th Cross Rd/2		1	20.00	4.50	0.15	13.50		
							13.50	**5412.00**	**73,062.00**
16	Providing and constructing un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base, with 43 grade cement or any other type as per Clause 1501.2.2 **M30 (Grade)**, coarse and fine aggregates conforming to IS:383, maximum size of coarse aggregate not exceeding 25 mm, mixed in a concrete mixer of not less than 0.2 cum capacity andappropriate weigh batcher using approved mix design, laid in approved fixed side formwork (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the formwork as per drawing), spreading the concrete with shovels, rakes, compacted using needle, screed and plate vibrators and finished in continuous operation including construction joints, , primer, sealant , curing of concrete slabs for 14- days, and water finishing to lines and grade as per drawing and technical specification clause 1501 with all lead, lifts, loading & unloading charges, cost and conveyance of all materials, labour, equipments etc., complete. as per the directions of the Engineer-in-charge of the work.(V-III, P.No-148,I No-16.28, CSR 2023-24).								
	Basic rate	**6754.00**							
	Area Weightage 10%	**675.40**							
	Total	**7429.40**							
		Cum							
	For CC Road								
	Kanakanagara								
	5th Cross Rd/2		1	20.00	4.50	0.15	13.50		
							13.50	**7429.40**	**100296.90**
17	Providing and laying of **hot applied thermoplastic compound** 2.5 mm thick including reflectorising glass beads @ 250 g/ m2 area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35:2015.The finished surface to be level, uniform and free from streaks and holes.(V-III,I No-8.15, P.No-67 of CSR 2023-24)								
	Basic rate	**530.00**							
	Area Weightage 10%	**53.00**							
	Total	**583.00**							
		Sqm							
	For Edge Line								
	Allansandra Colony								
	1st Main Rd								
	Allansandra Burial Ground to R.O Plant Through Shaneshwara Temple		2	636.00	0.10		127.20		

Sl No	Description of Items	Unit	No	Length	Width	Depth	Quantity	Rate	Amount
	From Library To Appana Rd		2	130.00	0.10		26.00		
							153.20	583.00	89,315.60
18	Cost of Haulage Excluding Loading and Unloading Taking output 25 t load and lead 10 km = 100 t.km (V-III Page No.5, Item No.1.4C of CSR 2023-24)								
	Basic rate	8.00							
	10KM Lead = 8*10	80.00							
	Area Weightage 10%	8.00							
	Total	88.00							
		t.Km							
	Qty frm Item No-2		1	589.87	1.28		755.03		
	Qty frm Item No-9		1	229.80	1.28		294.14		
	Qty frm Item No-8		1	16.88	2.10		35.44		
							1084.61	88.00	95,446.02
								Total Construction Cost	8472963.15
								18% GST For S.R Items	1525133.37
								Sub Total 1	9998096.51
								Utility Shifting,Miscellaneous and Rounding off	1,903.49
								GRAND TOTAL	10000000.00

Certificate

1. The workspot was inspected and works is found to be necessary.
2. The area comes within the Bruhat Bangalore Mahanagara Palike limits.
3. The rates adopted based on the PWD SR,Bangalore circle for year 2023-2024, Data Rates

Assistant Engineer
BBMP Bangalore

Asst. Executive Engineer
BBMP Bangalore

Executive Engineer,
Yelahanka Division
BBMP Bangalore

Administrative Sanction for Rs. 100.00 Lakhs
Rupees One Crore Only
is accorded under head P-1878
Registered as CE No. 48 Subject to conditions contained in enclosed memo No. BBMP/EE/YNK/0/AS/48/23-24 Dt. 12/2/24

Executive Engineer

Technical Sanction
Accorded For 100.00 Lakhs
Head of A/C P-1878
CER NO : 110 Dt: 12/2/24